

SECRET

26 September 1973

MEMORANDUM FOR: Director of Economic Research

SUBJECT : Defense Estimates in ER IM 73-59, A Comparison of the US and Soviet Economies

1. The Office of Strategic Research has raised questions about our dollar estimates of US and Soviet defense spending in Figure 3 of the subject IM. This memorandum is to answer their queries.

2. US Defense Spending.

a. In formulating US-USSR comparisons, U/SI works from US Department of Commerce data for the US side of the comparison. The chief reason for this procedure is that the CIA estimates of Soviet GNP are intended to match conceptually the US Department of Commerce national accounts.

b. The US defense spending figures in IM 73-59 are from Department of Commerce data which are actual expenditures on a calendar-year basis. The Department of Defense also publishes US defense spending estimates, but on an obligational authority, fiscal-year basis. Thus, the Commerce and Defense figures can not be directly compared.

c. U/SI adjusts the Commerce estimate of purchases of goods and services for defense by subtracting items carried elsewhere in the U/SI comparisons (e.g., military assistance which is included in the "other" category of GNP); OSR estimates of Soviet military expenditures do not include these outlays. The \$73.3 billion of US defense spending in IM 73-59 results from such adjustments and will differ from Department of Defense data by this adjustment as well as by the actual-obligational and calendar-fiscal differences noted above. (See Attachment 1).

SECRET

SECRET

d. OSR uses Department of Defense obligational authority estimates of defense because these figures are published in the detail required by OSR for mission and category analysis; the Department of Commerce figures do not contain the required detail. OER, however, has no need for mission and category detail on defense spending.

### 3. Soviet Defense Spending.

a. The dollar value for the defense component in Soviet GNP published in IM 73-59 is our familiar geometric mean of ruble and dollar comparisons. We compare Soviet and US GNP both in rubles and in dollars. Ruble comparisons are based on prices and output patterns in the USSR while dollar comparisons reflect prices and output patterns in the US. Since the two comparisons give different results we calculate the geometric midpoint of the ruble and dollar comparisons in order to publish a single set of figures.

b. OSR supplies ruble and dollar estimates of Soviet defense spending to U/SI. Some components of the ruble series (personnel, O&M, construction and R&D) are estimated in rubles. Weapons systems are first costed in US dollars and then converted to rubles by means of ruble-dollar ratios. Components of the dollar defense estimates are derived similarly: personnel, construction and weapons systems are costed directly in dollars while ruble estimates of R&D are converted to dollars by a ruble-dollar ratio. Soviet GNP is estimated by OER in rubles and US GNP is estimated by the Department of Commerce in dollars. Ruble dollar ratios are applied to both sets of accounts by OER to derive Soviet GNP in dollars and US GNP in rubles. Attachment 2 shows the use of OSR ruble and dollar estimates of Soviet defense spending in U/SI's derivation of geometric mean dollars.

4. This problem of the two offices using different data is not new and is not reconcilable since OER is oriented to the Department of Commerce procedures, not those of the Department of Defense. U/SI's intent in IM 73-59 was to footnote Figure 3 as "US data from Department of Commerce," but this footnote was inadvertently deleted. I propose that future OER publications contain the following footnote to US

SECRET

SECRET

defense data to warn readers against casual comparisons with OSR or Defense Department data: "Actual expenditures, not obligational authority." I question the need to bring in the technical language about geometric-mean dollars; we have used geometric-mean dollars for many years in OER publications that require a dollar estimate of the defense component of Soviet GNP.

5. We have conferred with [redacted]  
OSR on the specific quantitative questions.

25X1

25X1

[redacted]  
Chief  
Strategic Impact Branch

Attachments:  
(as stated)

Distribution:

Orig & 1 - Addressee w/atts  
2 - D/U w/atts  
5 - C/SI w/atts

OER/C/SI [redacted] (26 Sept 73)

25X1

SECRET

Attachment 1

SECRET

US Defense Expenditures  
1972Billion 1972 Dollars

A. Total actual expenditures for national defense (Department of Commerce) - calendar year	78.7
Less: Transfer payments	3.9
Grants-in-aid	.6
Net subsidies	- .1
Equals: Purchases of goods and services	74.3
Less: Additions to stockpiles, expansion of defense production, military assistance	1.0
Equals: US defense expenditures used in GNP comparisons	<u>73.3</u>
B. Total obligational authority for goods and services (Department of Defense programs)*	
Fiscal year 1972.	72.3
Fiscal year 1973	73.3

\* Excludes additions to stockpiles, expansion of defense production and military assistance.

25X1

SECRET

Attachment 2

~~SECRET~~US and USSR: Geometric Mean Comparisons  
of Defense 1972

	<u>Billion Rubles</u>	<u>Billion 1972 Dollars</u>
<u>USSR</u>		
Total defense net of pensions (OSR estimates)	21.4	78.9
<u>US</u>		
Total defense (OER estimates based on Department of Commerce data)	22.5	73.3
<u>Geometric mean:</u>	$\sqrt{\frac{21.4}{22.5} \times \frac{78.9}{73.3}} * 73.3 = 74.1$	



25X1

~~SECRET~~